

We claim:

1. A solution formulation comprising:
a physiologically tolerated buffer selected from the group
5 consisting of TRIS and arginine; a monomeric insulin
analog; zinc; and a phenolic preservative.

2. The formulation of Claim 1, wherein the
monomeric insulin analog is Lys^{B28}Pro^{B29}-human insulin and
10 the buffer is TRIS.

3. The formulation of Claim 1, wherein the
monomeric insulin analog is Asp^{B28}-human insulin and the
buffer is TRIS.

15 4. The formulation of Claim 2 further comprising
an isotonicity agent and wherein the pH of the formulation
is between pH 7.0 and pH 8.0 when measured at a temperature
of 22°C.

20 5. The formulation of Claim 4, wherein the
concentration of Lys^{B28}Pro^{B29}-human insulin is between about
100 and about 400 units per milliliter.

25 6. The formulation of Claim 5, wherein TRIS is
present at a concentration of about 2 mg/mL; glycerol is
the isotonicity agent and is present at a concentration of
about 16 mg/mL; and m-cresol is present at a concentration
of about 1.76 mg/mL and phenol is present at a concentration
of about 0.715 mg/mL.

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7. A stable, soluble formulation of a monomeric insulin analog for use in a continuous infusion system, consisting essentially of: an isotonicity agent; a buffer selected from the group consisting of TRIS and arginine; a monomeric insulin analog; zinc; and a phenolic preservative.

10 8. The insulin analog formulation of Claim 1, which further comprises protamine.

15 9. The formulation of Claim 8, wherein the insulin analog is Lys^{B28}Pro^{B29}.

10 10. The formulation of Claim 8, wherein the insulin analog is Asp^{B28}.

20 11. A method for treating diabetes comprising administering an effective dose of the formulation of Claim 1 to a patient in need thereof.

25 12. The method of Claim 11, wherein the formulation is administered using a continuous infusion system.

13. A method for treating hyperglycemia comprising administering an effective dose of the formulation of Claim 1 to a patient in need thereof.

14. The method of Claim 13, wherein the formulation is administered using a continuous infusion system.

5 15. A method for treating diabetes comprising administering an effective dose of the formulation of Claim 8 to a patient in need thereof.

10 16. A method for treating hyperglycemia comprising administering an effective dose of the formulation of Claim 8 to a patient in need thereof.

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